

We claim:

1. A construction panel comprising:
a first wire mesh member and a second wire mesh member;
a screed means integral with each of said wire mesh members; and
a middle member disposed between said first and second mesh members and positioned to define a gap on each side..
2. The construction panel of claim 1, wherein at least one of said gaps is adapted to accept a dowel for securing said panel.
3. The construction panel of claim 1, wherein said middle member comprises a plurality of layers, said layers comprising wire trusses and polystyrene foam.
4. The construction panel of claim 3, wherein said middle member is compressed up to approximately 2.5 inches and secured by a clamp means in the compressed state prior to attachment of said wire mesh members.
5. The construction panel of claim 4, wherein said V-shaped impressions have a depth of about $\frac{1}{2}$ inch and said panel has a width of about 47.25 inches prior to release of said clamp and a width of about 48 inches after the release of said clamp.
6. The construction panel of claim 1, wherein said screed means comprises at least two parallel V-shaped impressions defined in at least one of said wire mesh members.
7. The construction panel of claim 1, wherein said screed means comprises a clipped-on-screed member attached to at least one of said wire mesh members.
8. The construction panel of claim 1 further comprising: means for securing said wire mesh members to said middle member.
9. The construction panel of claim 8 further comprising a Z-clip having oppositely oriented arms on each end, said arms adapted for fitting through at least one hog ring associated with each of said wire mesh members.

10. The construction panel of claim 6 further comprising an outer layer deposited on at least one side of said panel, wherein said outer layer is cut flat using said V-shaped impressions as a screed.

11. The construction panel of claim 7 further comprising an outer layer deposited on at least one side of said panel, wherein said outer layer is cut flat using said clipped-on screed member as a screed.

12. The construction panel of claim 6, wherein said panel is between about 47.25 inches to about 48 inches wide and said impressions are about 30 inches from center.

13. The construction panel of claim 6, wherein said panel is between about 47.25 inches to about 48 inches wide and includes a first impression at about 24 inches and a left impression about 8 inches from a left edge of said panel and a right impression about 8 inches from a right edge of said panel.

14. A method of making a construction panel comprising:

making at least two parallel V-shaped impressions along a length of a wire mesh member;

compressing a wire truss and polystyrene foam composite sandwich to form a compressed member;

securing said compressed member in the compressed state;

attaching a pair of mesh members to opposite sides of said compressed member to form composite member;

unsecuring said compressed member;

coating at least one side of said composite member; and

cutting said coating using the apex of said V-shaped members as a mechanical screed.

15. The method of claim 14, wherein said compressing step comprises positioning at least part of said wire truss in slots formed between risers of a jig table and positioning at least a portion of said polystyrene foam adjacent said risers and

contacting said composite with a jig press to compress said composite up to about 2.5 inches to form said compressed member.

16. A method of making a construction panel comprising:

compressing a wire truss and polystyrene foam composite sandwich to form a compressed member;

securing said compressed member in the compressed state;

attaching a pair of mesh members having clipped-on-screed members to opposite sides of said compressed member to form composite member;

unsecuring said compressed member;

coating at least one side of said composite member; and

cutting said coating using the clipped-on-screed member as a mechanical screed.

17. A method of attaching a plurality of construction panels comprising:

securing a plurality of dowels to a substrate, said dowels disposed on both sides of said panels;

securing at least one clip to a substrate in an area where two panels will meet to form a lateral seam;

disposing a pair of panels having a gap between a middle member and front and back wire mesh members such that said dowels are disposed in said gap and said panels meet to form a seam in said clip;

securing said clip to said panels.

18. The method of claim 17 wherein said panels each include a lap of wire mesh for allowing a wire tie to be fitted through a hole defined in said clip such that both the wire mesh of a panel and the lap of an adjacent panel are capable of being wire tied to said clip.

19. The method of claim 17 further comprising:

removably coupling a plurality of clips to an inside area of said coupled panels; said clips positioned horizontally across said seam in at least one vertical position along said seam;

coupling a rigid member with at least two clips; one clip being disposed on each side of side seam; wherein said rigid member aids in holding said panels in alignment; and

applying a finishing material to an outside area of said panels.

20. The method of claim 17 further comprising panels meeting laterally to form a corner; and further comprising the steps of removably coupling clips on each side of said corner, said clips adapted to receive an L-shaped rigid member for holding said corner square; and

applying a finishing material to the side of said panels opposite said clips and rigid member.